BACKGROUND
In 1969, Bowdoin College in Maine became the first test-optional school in the United States, launching a movement that is now approaching its 50th year. Today, nearly a third of the all U.S. four-year colleges and universities are test-optional or test flexible. How colleges and universities define the term has varied widely. For some schools, test optional means first-time, first-year, degree-seeking applicants are not required to submit ACT or SAT scores for the purpose of admissions. Many more institutions are test flexible, allowing this choice for students who meet certain GPA requirements, or who submit other results like Advanced Placement or International Baccalaureate subject test scores as evidence of academic proficiency. Other common exceptions to schools’ test-optional policies include preclusion of certain majors, home-schooled students, transfer students and international students. (See Appendix 1)

Most recently, Ball State University became the first four-year public university in Indiana to make standardized tests optional for admission. This is effective for the students beginning their college education in fall 2019. In response, IU sent the following statement to local media who were inquiring about our plans, “Indiana University continues to evaluate best practices to identify ways in which we can support students’ access to college. Giving students the opportunity to choose whether to submit standardized test scores is just one piece we are researching and discussing.”

CHARGE
The IUPUI Task Force on Test-Optional Admission is charged with analyzing the impact of such a change at IUPUI.

What is the combination of factors needed to admit as many students as possible with a reasonable chance for success? What would be the pros and cons of eliminating standardized test scores from the admission decision? Various schools have taken different approaches and there is a need to understand what might work best at IUPUI.

- Potential for expanding or diversifying the student body
- Current placement uses of standardized testing and the viability of alternatives
- Effect on allocation of institutional, merit-based aid
- Impact on the Honors College
- Impact on direct admission to academic units
- Impact on undergraduate student recruitment and admissions processing, operations
- Impact on graduation rates
- Level of impact on image/perception
- Recommendations (if any) for retaining mandatory test scores for certain fields or constituencies
- Other potential predictors/measures of success
EXECUTIVE SUMMARY

EXISTING DATA HIGHLIGHTS:
Research across the country and confirmed at IUPUI shows that high school GPA is the strongest predictor of retention. After taking into account high school GPA, AP credit, and number of honors classes, SAT/ACT has a small effect on retention. (See Appendix 2)

- Research findings suggest that standardized test scores are biased against minorities, females, and financially disadvantaged students (Micceri, 2009; Micceri 2010).

- Some studies suggest that the more cost-effective enrollment management practice is to retain students rather than recruit new students to replace students lost to attrition (e.g. Mattern & Patterson, 2009). As such, consideration should be given to factors that predict students’ academic success and persistence. HS GPA and rigor of HS curriculum tend to have greater predictive value than SAT scores based on IUPUI local research.

- Other factors such as HS Grades, Essays, Rigor of HS Curriculum (e.g., AP, Four Years of HS Math, High Level of HS Math Taken Senior Year such as Calculus, Academic Honors Diploma) may be a more holistic picture of student academic preparation and motivation compared to a test score. A test score is based on one test score obtained during a test process lasting a few hours, while HS GPAs, rigor of curriculum, earning an Academic Honors Diploma are more representative of patterns of student behavior, study habits, and motivation based on several years of behavior.

- Students with higher high school GPAs are more likely to have developed good study skills and remain in college. Westrick et al (2015) found that an academic self-discipline scale had a correlation of 0.32 with high school GPA, but only a 0.02 correlation with admissions test scores. High school GPA is determined in part by non-cognitive characteristics that are not related to test scores. Westrick et al. (2015) explains, “High school GPA is a measure of performance in high school courses and is a reflection of students’ sustained motivation, work ethic, and academic mastery…” (pg. 30).

- Other research suggests that high school GPA is a better predictor of first-year GPA, since admissions test scores primarily measure cognitive abilities, while high school GPA includes cognitive, non-cognitive, and other positive academic behaviors. (Sawyer, 2010).

- There are scholarship programs currently available for students at IUPUI that rely on a holistic review instead of SAT/ACT scores (e.g., Norman Brown Diversity and Leadership Scholarship and Sam H. Jones Scholarship). The students in these programs perform at high levels academically at IUPUI and have high retention and graduation rates. This data supports the notion that a holistic review of more predictive indicators could yield better retention and graduation rates at IUPUI overall. NOTE: There are also dedicated support programs available to the recipients of these competitive scholarships that likely also affect the positive retention and graduation.
## TASK FORCE RESEARCH AND ANALYSIS

<table>
<thead>
<tr>
<th>Type/Level of Impact</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expand/Diversify Student Body</strong></td>
<td><strong>Good</strong></td>
</tr>
<tr>
<td><strong>Placement Test Process</strong></td>
<td><strong>Neutral</strong></td>
</tr>
<tr>
<td><strong>Institutional, Merit-Based Aid &amp; Scholarships</strong></td>
<td><strong>High</strong></td>
</tr>
<tr>
<td><strong>Honors College</strong></td>
<td><strong>High</strong></td>
</tr>
</tbody>
</table>
### Direct Admission to Academic Units

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Neutral</th>
</tr>
</thead>
</table>

Criteria other than test scores is preferred and are better indicators; challenge is how to gather the best indicators and then how to provide the resulting additional review. There may be one or two schools or programs where SAT/ACT will continue to be required for specific reasons that are of benefit to the student.

### Admissions Process

<table>
<thead>
<tr>
<th>Criteria</th>
<th>High</th>
</tr>
</thead>
</table>

The additional time, funding, staffing, resources, and coordination needed for a more holistic review of applications impacts stakeholders across the campus and the institution at-large. More in-depth analysis would be needed to get estimate total cost. Note that International Admissions has been test-optional already with the exception that test scores are needed for merit aid.

### Graduation Rates

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Neutral</th>
</tr>
</thead>
</table>

Current research shows that graduation rates are not affected by the change to test-optional policies.

### Image/Perception

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Low</th>
</tr>
</thead>
</table>

The impact on our US News and World Report Rankings is unexplored. Whether this change would impact perception of other key influencers (i.e. parents, alumni, etc.) is also unknown.

### POTENTIAL POSITIVE ASPECTS OF MOVING TO TEST-OPTIONAL POLICY

- Increased applicant pool with improved/increased diversity.

### POTENTIAL NEGATIVE ASPECTS OF MOVING TO TEST-OPTIONAL POLICY

- If other factors are considered in the absence of SAT/ACT scores such as rigor of high school curriculum and essays, it will require an investment of extra resources for admissions in the form of personnel and technology tools to be able to process and analyze high school transcripts, essays, recommendations, etc.
- College students and families may find it confusing to navigate the college admissions process as some schools require SATs/ACTs while others may not. As such, many guidance counselors may recommend that students take SATs/ACTs so that more college options are available. In the end, most students may still take the SAT/ACT even if not required by IUPUI.
- With an increased number of students and likely not an increase in financial aid and scholarships, fewer dollars may have to spread across more students.
- Certain programs and processes at an academic level (such as the Honors College) would need to be further evaluated. Changes in selection criteria could translate to an increase in time to decision, budget, and staffing needs at the unit level.

### ADDITIONAL CONSIDERATIONS AND QUESTIONS

- Will the potential increase in applications help us to meet enrollment goals and is the ‘cost’ to do so worth it?
- If our student population changes over time, do we have the resources, tools, and programs to provide support to these students during their college experience so we maintain, or even improve, current retention and graduation rates?
- Since this change would affect so many areas, not only at a campus level but at an institution level, what do we realistically need to do as a system to be successful in implementing this type of change if pursued?
- If a decision is made to zero in on high school rigor as a primary selection criteria, do we then exchange one bias (that associated with standardized tests) for another (over-selecting from certain select high schools with higher rigor)?
WHAT IS THE POTENTIAL FOR AN EXPANDED AND/OR MORE DIVERSE APPLICANT POOL?

KEY SUMMARY
Several schools that have gone to test optional have seen an increase in their applicant pool. In the study *Defining Access: How Test-Optional Works* (https://iu.box.com/s/wpz68vy0qyjm6d39riz7bby21xji8hmC), 28 institutions were studied before and after they made the move to test optional. Undergraduate enrollments ranged from 1,500 to 20,000 students. These schools consisted of recent adopters as well as long-time users of the policy. Institutions included were four-year, degree granting, not-for-profit, private and public institutions.

High level findings show:
- Vast majority of institutions in the study experienced an increase in application numbers. Almost all also saw an increase in underrepresented minority (URM) applications. When comparing institutions in the study with their test-required peers, 57% of test-optional institutions experience greater growth while 26% experienced less growth. On average, public institutions included in the study saw an 11% increase in applications.
- Test submitters and non-test submitters do behave differently in the funnel. Non-submitters are shown to be admitted at lower rates but conversely enroll at higher rates than submitters.
- Non-submitters were more likely to major in social sciences and liberal arts programs. Submitters were more likely to select business or science, technology, engineering, and math (STEM) programs.
- Regarding URM growth and enrollment, “almost all institutions saw a rise in URM applications after test-optional policy, and two-thirds of them saw that rise correspond to URM enrollment growth above that seen by a matched test-required peer institutions.”

LIMITATIONS/CONSIDERATIONS
An increased application pool equates to a need for more evaluations which could lead to higher staffing levels. Further detailed funding and staffing analysis would need to occur for both IUPUI and IUPUC to determine cost of additional review time for more applicants using criteria that will take more time to review. Given the change in student composition, the effect on whether this will help to meet enrollment goals is not certain. However, given that non-submitters are more likely to enroll in social sciences or liberal arts programs, it could be a boost for those programs.

WHAT IMPACT WOULD TEST OPTIONAL HAVE ON PLACEMENT TEST PROCESSES?

KEY SUMMARY
ACT/SAT scores are used in comparison to Assessment and Learning in Knowledge Spaces (ALEKS) scores for Math to determine if scores are incongruent; incongruent test scores require a student to take ALEKS in a proctored environment. IUPUI has English self-placement, an internal Chemistry placement test and foreign language placement processes but none of these use SAT/ACT in any way. IUPUC does not use ACT/SAT in course placement. IUFW relies on PUFW for placement because Purdue offers all of the general education classes so they would need to follow Purdue policy/practice.

LIMITATIONS/CONSIDERATIONS
Without ACT/SAT it will be difficult to assess the validity of a student’s ALEKS score when taken in an un-proctored environment so a new practice for Math placement would need to be implemented. For IUFW, since Purdue governs the general education courses and since Purdue plans to continue to require ACT/SAT, IUFW students would either need the SAT/ACT or go directly to the Purdue placement exam. And, since IUPUI processes the admissions applications for IUFW, this would be a critical communication piece and require attentive admissions application processing along with further investigation.
WHAT IMPACT WOULD TEST OPTIONAL HAVE ON ALLOCATION OF INSTITUTIONAL, MERIT-BASED AID & SCHOLARSHIPS?

KEY SUMMARY
The report, Defining Access: How Test-Optional Works, (https://iu.box.com/s/wpz68vy0qyjm6d39riz7bby21xji8hmc), shows that non-submitters are more often to be high-need students and gift aid per capita increased among institutions when comparing pre-to-post adoption of a test-optional policy. Findings also indicate that due to the potential change in student population as a result of the policy, institutions will need to consider additional financial aid commitments.

Other highlights include:

- In the study performed, “the enrolled ‘needy’ non-submitters had a higher than average demonstrated need than the ‘needy’ submitters, median differences of $4k.”

- The type of students that do not submit test scores also look different than submitters. “For instance, 35% of Black or African-American students chose to be Non-Submitters (12 percentage points higher than the overall non-submitting rate), as compared to 18% of white students. Women chose to be Non-Submitters at higher rates than men.”

Historically at IUPUI, admissions-based (merit aid) scholarships have been automatically awarded at the time of admission to incoming freshmen who apply by the specified deadline, and demonstrate the minimum high school GPA and standardized test score (ACT/SAT) required by the particular scholarship. For examples of specific scholarship criteria visit https://admissions.iupui.edu/cost-aid/index.html.

Incoming students who may not automatically meet these requirements, but who wish to be considered for potential scholarship eligibility, may submit an appeal to have their academic record holistically reviewed. This appeal process considers other criteria, such as demonstrated academic rigor, recommendations from counselors/teachers, etc. Presently, IUPUI has partnered with Maguire Associates to evaluate the future strategy for awarding IUPUI institutional aid. They have been asked to design an awarding structure within the existing institutional budget that allows for a broader award spectrum that also produces a greater net tuition revenue for the campus. While there is room for some flexibility within the new awarding structure to tweak the awarding process, the mechanism to accomplish these goals will remain largely automated. Therefore, it is recommended that if IUPUI adopts a revised admissions policy that allows for students to be admitted without standardized test scores, that these students be invited to submit an appeal, as referenced above, to enable a holistic review for scholarship eligibility.

There are scholarship programs currently available for students at IUPUI that rely on a holistic review and not on SAT/ACT scores (e.g., Norman Brown Diversity and Leadership Scholarship (NBDLSP) and Sam H. Jones Scholarship). The students in these programs perform at high levels academically and have high retention and graduation rates. IUPUI also participates in the Raise.me micro-scholarship program also. While standardized scores are considered for a couple of Raise.me micro-scholarships, the vast majority are set on different criteria that does not include standardized tests so a change to test-optional admissions would not impact Raise.me since it is already set up to award students who may not qualify for traditional awards at IUPUI.

LIMITATIONS/CONSIDERATIONS:
If the number of applications increases and if the research bares out that the majority of non-submitters likely have higher need, then one of two things will occur. Either the current dollar amount awarded per student would go down or the current scholarship amounts would be distributed to the same number of students but, perhaps, a different population. Reducing the scholarship amount could negatively affect enrollment as a certain threshold amount may be needed to entice a student to enroll.
KEY SUMMARY
A move to ‘test-optional’ could impact the Honors College in a variety of ways.

- **Diversity:** The Honors College welcomes the potential to further diversify the Honors College. All research points to a positive impact on diversity with schools that are test-optional so assuming budget and scholarship awards remain unchanged, this would be a positive outcome.

- **Admissions Processing:** In some ways, many of the Honors applicants look similar—they have mostly A grades and high test scores. As a result, the Honors College is left with trying to evaluate fairly and equitably a student who comes from rural high school X with very few honors or AP courses as compared with suburban high school Y with lots of privileges. While there is still confidence high school GPA, inflated or not, is a stronger predictor of success than test scores, the Honors College is also pushing to come up with additional factors that can be taken into account in the essay and interview portion of the process, which will continue to broaden/diversify the pool of applicants to the Honors College.

- **Scholarships/Budget:** Honors admissions criteria is the same as the university distinguished and outstanding scholar levels. Admissions-based scholarships are provided and then Honors supplements those awards (75% admission-based, 25% Honors).

- **Homeschooled Students:** Roughly 12 students per year directly admitted to the Honors College are home schooled students. Currently, the Honors College uses a somewhat holistic review process of these students including an interview. Currently home schoolers have all A grades and submit standardized test scores. Since home schoolers do not have weighted GPAs, they could also be at a disadvantage. Weighted GPA is when an “A” in an AP or honors class actually weighs more than an “A” in a regular class in terms of GPA. For example, many high school GPAs are above a 4.0 because the high school weights the grades. Honors College sees many 4.4+ and up to 5.0 GPAs because of this weighting. It is difficult to compare a homeschooled student with a perfect 4.0 to the vast majority of our applicants who have over a 4.0. These students are, of course, also compared using the Honor rubric but with limited seats, this becomes a difficult decision. Test scores definitely help in this case.

LIMITATIONS/CONSIDERATIONS
Without test scores, the Honors College would need other predictors (high school math, written essay, engagement indicators, resiliency, etc.) for admission. While these indicators are likely much better for determining student success, gathering and revising this more nebulous information will take more time.

For home-schooled students, there would be a need to compare them across other student groups in a consistent manner. Increased time may be needed for review and processing of both groups of applications could lead to increased staffing and funding needs. Another alternative would be to continue to require test scores for home-schooled students.

Campus desire to shift more aid to need-based students means uncertainty for the Honors budget. The Honors College budget will be impacted negatively if they can no longer count on as many admission based awards or the same dollar amount in admission based awards. The result will be fewer Honors College direct admits which could be a detriment to enrollment and retention. This could also result in a lack of transparency if the Honors College is unable to state up front the dollar amount of their scholarships.

DOES TEST OPTIONAL IMPACT GRADUATION RATES?

KEY SUMMARY
Existing research shows that graduation rates did not suffer as a result of an institution moving to test-optional. As stated in the study Defining Access: How Test-Optional Works ([https://iu.box.com/s/wpz68vy0qym6d39riz7bby21xij8hme](https://iu.box.com/s/wpz68vy0qym6d39riz7bby21xij8hme)), non-submitters graduated at marginally higher rates than submitters and “while graduation rates were a pivotal feature of this study, the specifics of student retention were not investigated.”
LIMITATIONS/CONSIDERATIONS
Institutions included in the study were smaller institutions (17 of the 28 had a size of less than 5k in total enrollment). Of the IUPUI peer set, Temple and Virginia Commonwealth are the two that have implemented similar policies (2015/2016) so graduation data is not available yet.
It is unclear what impact a change to test optional would have on retention or academic preparedness for grad school given graduate-level testing is often required.
Given the potential needs of non-submitters, additional resources and programs may need to be created to support this student population to ensure student success.

HOW WOULD TEST OPTIONAL IMPACT IMAGE/PERCEPTION OF IUPUI ON INFLUENCERS?

KEY SUMMARY
Existing qualitative research from Eduventures shows that guidance counselors favor the change to test optional admissions and do not believe it would harm an institution’s reputation. From a quantitative study conducted by Eduventures among admitted students at a small liberal-arts college, the following findings were uncovered:

- Moving to test optional would not have impacted stated application behavior among the vast majority of students who were already interested in an institution. Of those, 77% indicated they would have submitted their scores anyway, 20% would not have submitted but still applied, and only 4% would not have applied at all.

- Students with a high SAT score and low GPA are the segment most likely to be at odds with a test-optional policy. While not quantified in the study, a theory behind this stems from a student’s belief that they may not have been admitted to a particular institution with a low GPA but high SAT score.

Anecdotal information from the Honors College suggests that test score minima causes some parents to think more positively about IUPUI for Honors and International recruitment. Parents and other key stakeholders’ perceptions of Honors increases when they see the standardized test score minima. Doing away with this minima could damage our reputation. Without a test score requirement, there is some concern that the IUPUI experience becomes merely an extension of high school.
The School of Informatics at IUPUI removed their requirement for a GRE for their Informatics Master’s program for roughly 4 years. The end result was a noticeable decline in the quality of the students enrolled. As a result, the GRE requirement for this program was reinstated. There is sentiment that, for graduate programs, the requirement for a GRE does affect applicant perception of the program. Requiring a GRE implies a better program to the student/influencer.

LIMITATIONS/CONSIDERATIONS:
There is currently no primary research being explored to address IUPUI brand/reputation. The research highlighted is approximately 10 years old and the institution included is not considered comparable to IUPUI. The impact on our US News and World Report Rankings is unexplored. Whether this change would impact perception of other key influencers (i.e. parents, alumni, etc.) is also unknown.

WHAT IMPACT WOULD TEST OPTIONAL HAVE ON DIRECT ADMISSION TO ACADEMIC UNITS?

KEY SUMMARY
Data confirms that students with sufficient academic preparation to be directly admitted to their academic school are more likely to be retained.”(Hansen, n.d.). Eight academic units currently use test score as part of their admissions criteria; seven units do not use SAT/ACT as part of their admissions decision. Of the eight units who do use SAT/ACT, six have indicated other criteria that could be used to replace the SAT/ACT including a combination of high school GPA,
The challenges shared were few. An example of one concern came from the Kelley School of Business regarding perception if IUB and IUPUI did not share the same admission requirements. Others documented some concern about the personnel time for review of essays and at least temporary apprehension of faculty. For School of Engineering and Technology, SAT/ACT math scores have proven to be good predictors of success in first-year engineering programs. Also, a specific threshold or higher on the math section of the SAT/ACT exempts engineering students from having to take the ALEKS match placement exam. For these reasons, E&T would continue to require SAT/ACT scores.

Note that there is no “direct admit” practice at IUFW since all students need to enroll in the pre-major program to enroll in general education courses offered by Purdue.

LIMITATIONS/CONSIDERATIONS
For the School of Education, while criteria other than test scores could be used for general direct admission, SAT/ACT scores can be used to exempt students from having to complete the Core Academic Skills Assessment (CASA) prior to being admitted to the teacher education program. In this case, it could be beneficial to the students to have submitted test scores. There may be other, similar cases where communication to the affected students will be critical.

KEY SUMMARY
For IUPUI, while data shows that test scores are not good indicators of student success, IUPUI’s automated Preliminary Admissions Selection System (PASS) currently weighs GPA and test scores in making admissions decisions. Approximately 95% (or more) of all first-year undergraduate (FYU) applications are reviewed and approved or denied through PASS.

IUPUI international admissions has been test-optional with exception that test scores are needed for merit aid. IUPUC admits all high school students with Honors diplomas. Test scores are needed currently at IUPUC for scholarships and IUPUC has denied admission based on test scores.

With the current UG Admissions system and processes, it is estimated that approximately 200 applications go through holistic review now. For each file, three people individually evaluate the application and estimated time per person for review of one application is 10 minutes (3 people x 10 minutes = 30 minutes per application). If the three person team does not unanimously agree on the admission decision after a first pass, additional discussion is necessary which increases the time slightly. Holistic review can also mean that the time for a student to receive a decision may increase.

For home schooled students, high school GPA scores are not provided (or vast majority indicate they have a 4.0) so test scores are relied on for admitting this group. According to IUPUI data, in fall 2017, 45 home school students were admitted while 52 were admitted in 2018. Home schooled students had an average SAT of 1171 (1099 on the old scale), while 2018 home school beginners had an average SAT of 1220 (none of the students included here had a high school GPA).

Anecdotaly, based on conversations with the Admissions Office, the University of Chicago (a test optional peer) reviews their applications based on roughly 10 separate criteria so removal of the test score was not significant.

LIMITATIONS/CONSIDERATIONS:
There are several areas that would need further review if a change to test optional admissions were to occur, including but not limited to:

- **Additional staffing/funding**: Currently, IUPUI has one programmer/analyst who runs PASS (and makes adjustments/tweaks/provides maintenance). Without test scores, this current system which provides a significant number of automatic admissions decisions would need to be disabled or re-written in some way. With a move to
A holistic review of each application, review times will lengthen which will result in more status check phone calls and emails. Additional funding would be needed to account for increased staffing needs and possibly resources/tools to accommodate for the increase. Without additional resources to keep with current turnaround times, applicants would not hear about decisions for a lengthy period of time which would have significant, negative effective on recruitment and admissions yield.

- Need for additional resources would begin with a determination of how PASS might be changed to continue to provide automatic decisions on the majority of applications. For students who decided to send test scores, PASS would continue to function as it does now. Absent test scores, more analysis and discussion would need to occur to determine how the system could be changed to continue to provide some level of automated support. If PASS were to only factor in GPA (removing test scores as a variable), GPA values across high schools would need to be evaluated for some type of ‘academic rigor.’ While CollegeBoard does currently provide an environmental context dashboard that evaluates school profiles based on geographies, whether or not this could be a potential way to evaluate and compare high schools is still unknown.

- An increase of 11% in applications (as referenced in the literature) would equate to 1,650 more first year applications. Again, depending on the efficiency of a new PASS system, some number of these new applications would need a more holistic review which currently requires roughly 30 minutes per application. Of course, this estimate is based on students providing test scores. Without test scores other variables would need to be evaluated and will take more time than a review of standardized test scores.

- It is currently estimated that 40,000 phone calls per year are fielded by the frontline admissions staff. A move to test optional admissions will impact this number as well with more questions and need for clarification from applicants. More time to review applications leading to longer time to decision will also result in more application questions to the frontline.

- Training/cooperation efforts with central university systems: Coordination with USSS and UITS would be necessary to make changes to the ApplyIU system since a prospective student would need to indicate whether they plan to provide test scores or wish to instead pursue a test-optional review. Cost/development needs, along with overall timing and priority management, could present a challenge as changes to this system would need to be prioritized, developed, tested and implemented.

- Changes to xml transcript exchange: Determine which information from the high school might be able to be added to the high school to college transcript exchange and then update our SIS to accept those data points. This would allow for a great deal of continued automation, but based on more and better selection criteria.

- Revised reporting/tracking: Given all of the other major adjustments over the past three years (i.e. addition of essay, ApplyIU app, and Common App), another change would impact trend tracking and reporting capabilities. Additional reports would need to be developed.

- Communication/marketing: An audit of materials would be needed to ensure change is communicated across all stakeholders. This will also require additional funding, timing, and resources to take effect. Meeting with the academic units would be needed to solicit feedback and explain any changes. Front-line staff would need to coordinate messaging with counseling stakeholders.

**OTHER RECOMMENDATIONS & CONSIDERATIONS**

From the summary above, areas where SAT/ACT requirement may need to be retained includes but may not be limited to:

- School of Education students who may want to teach
- School of Engineering and Technology for direct admission (math scores good predictors and certain SAT/ACT scores exempt students from being required to take the ALEKS test)
- IUPUI admitted students
- Home-schooled students
- International Students expecting merit aid

Other potential predictors/measure of success
- High School GPA
- Math Success: Satisfactorily passing (grade of C or better) a MATH course (not just any Analytic Reasoning course) above the CORE-40 minimum MATH Requirement (Algebra 1, Geometry, and Algebra 2) during the senior year of high school. This would be a strong predictor of first year retention and graduation.
- Academic Honors Diploma
- Essay
- AP/dual credit
- Letters of recommendation
- High school rigor
- Student engagement

APPENDICES

Appendix 1: Definitions of Different Test Optional Formats

<table>
<thead>
<tr>
<th>TEST OPTIONAL POLICY TYPES</th>
<th>Optional for All Policy</th>
<th>Optional Plus Policy</th>
<th>Optional For Some Policy</th>
<th>Academic Threshold Policy</th>
<th>Test Flexible Policy</th>
<th>Test Blind</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Optional for All Policy</strong></td>
<td>Allows students to submit all scores as part of their application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Optional Plus Policy</strong></td>
<td>Requires students to submit all scores as part of their application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Optional For Some Policy</strong></td>
<td>Requires students to submit all scores as part of their application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Academic Threshold Policy</strong></td>
<td>Requires students to meet certain academic standards (e.g., SAT, GPA) as part of their application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Test Flexible Policy</strong></td>
<td>Students are allowed to submit scores as part of their application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Test Blind</strong></td>
<td>Students are not allowed to submit scores as part of their application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Students who meet certain academic standards (e.g., SAT, GPA) are admitted without standardized testing scores as part of the admissions decision.
- Students who do not meet certain academic standards (e.g., SAT, GPA) are not admitted without standardized testing scores as part of the admissions decision.
- Students who meet certain academic standards (e.g., SAT, GPA) are admitted with standardized testing scores as part of the admissions decision.
- Students who do not meet certain academic standards (e.g., SAT, GPA) are not admitted with standardized testing scores as part of the admissions decision.
- Students who meet certain academic standards (e.g., SAT, GPA) are admitted without standardized testing scores as part of the admissions decision.
- Students who do not meet certain academic standards (e.g., SAT, GPA) are not admitted without standardized testing scores as part of the admissions decision.

Source: Defining Access: How Test-Optional Works
Appendix 2: Research/Data Summary on Best Predictors

Research at IUPUI shows high school GPA is the strongest predictor of retention. After taking into account high school GPA, AP credit, and number of honors classes, SAT has a small effect on retention.

The table below depicts the effect of SAT score on fall-fall retention for first-time, full-time Bachelor’s degree seeking students entering the Indianapolis campus of IUPUI between 2010 and 2017, net the effect of other factors associated with retention that could be identified on an application. High School GPA had the strongest effect on fall-fall retention, both with and without SAT score included in the model. SAT score had a small but statistically significant effect when added to the model.

### Stepwise logistic regression of admissions variables on Fall-Fall Retention

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Standard error</td>
</tr>
<tr>
<td>High School GPA</td>
<td>1.28</td>
<td>0.05</td>
</tr>
<tr>
<td>AP Test Flag</td>
<td>0.43</td>
<td>0.05</td>
</tr>
<tr>
<td>Received Honors Diploma</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td>Best SAT score a</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Intercept</td>
<td>-3.63</td>
<td>0.14</td>
</tr>
</tbody>
</table>

All variables statistically significant at \( \alpha \leq 0.05 \).

1 Model statistically significant at \( \alpha \leq 0.05 \) (\( \chi^2 (3) = 1545.21 \)). McFadden’s \( R^2 \) = 0.055

2 Model statistically significant at \( \alpha \leq 0.05 \) (\( \chi^2 (3) = 1596.20 \)). McFadden’s \( R^2 \) = 0.057

a Pre-2017 SAT scores converted to current SAT scale. SAT score divided by 10 in order that effects may be interpretable

### Predictive strength of admission measures (raw and adjusted correlations)

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Predictive Strength (adjusted correlation)</th>
<th>Predictive Strength (raw correlation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT Tests, HSGPA, Add. Predictors</td>
<td>2,823</td>
<td>0.75</td>
<td>0.55</td>
</tr>
<tr>
<td>SAT Tests, HSGPA, Add. Predictors, SAT Subj. Tests</td>
<td>2,823</td>
<td>0.75</td>
<td>0.55</td>
</tr>
<tr>
<td>SAT Tests and HSGPA</td>
<td>2,823</td>
<td>0.75</td>
<td>0.55</td>
</tr>
<tr>
<td>High School GPA</td>
<td>2,823</td>
<td>0.74</td>
<td>0.54</td>
</tr>
<tr>
<td>SAT Tests</td>
<td>2,823</td>
<td>0.49</td>
<td>0.33</td>
</tr>
<tr>
<td>SAT ERW Section</td>
<td>2,823</td>
<td>0.46</td>
<td>0.31</td>
</tr>
<tr>
<td>Number of Honors or AP courses</td>
<td>2,823</td>
<td>0.46</td>
<td>0.21</td>
</tr>
<tr>
<td>SAT Math Section</td>
<td>2,823</td>
<td>0.46</td>
<td>0.32</td>
</tr>
</tbody>
</table>

The numbers in the next table in this appendix represent the prediction equations developed for Indiana University-Purdue University Indianapolis. Each column depicts: 1) a model with a different set of predictors used to formulate an equation for use in predicting Cumulative GPA through first year for applicants whose records contain the variables chosen for this study, and 2) the corresponding sample of students with these predictors.

The table above depicts the results from a validity study conducted by the Admitted Class Evaluation Service (ACES) using data from students who began their college career at IUPUI during the fall 2017 semester. This table depicts the raw and adjusted correlation between various predictors and first-year cumulative GPA. In these analyses, the strongest individual factor appears to be high school GPA, which had a 0.74 adjusted correlation with first-year cumulative GPA. By itself, SAT had a significant but much smaller correlation with cumulative GPA (0.49 adjusted correlation). The strongest predictive model, a combination of High school GPA, SAT score, and number of Honors and AP courses completed, had only a slightly higher correlation than high school GPA along (0.75 adjusted correlation).
# Appendix 3: IUPUI Direct Admit Feedback

## ACADEMIC UNITS THAT REQUIRE SAT/ACT FOR DIRECT ADMISSION

<table>
<thead>
<tr>
<th>ACADEMIC UNIT</th>
<th>Criteria school indicated they may be interested in using without test scores</th>
<th>Other Use of Test Scores</th>
<th>Challenges in Implementation</th>
<th>General Comments/Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>KELLEY SCHOOL OF BUSINESS</td>
<td>GPA Essay Academic Honors Diploma</td>
<td>None indicated</td>
<td>Perception challenge if Kelley at IUB doesn't also go this route.</td>
<td>With the test scores off the table, we could probably increase our minority applications, thus enlarging our minority enrollment which is a current goal for the UG program.</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>AP/dual credit Rigor of HS curriculum GPA Essay Involvement Letters of Recommendation</td>
<td>SAT/ACT can be used for exemption for CASA I – state requirement Test scores needed for CAEP accreditation</td>
<td></td>
<td>We would probably still encourage students wanting to be educators to submit test scores.</td>
</tr>
<tr>
<td>ENGINEERING AND TECHNOLOGY</td>
<td>N/A – see comments</td>
<td></td>
<td></td>
<td>SAT/ACT math scores have proven to be a good predictor of student success in the first-year of engineering programs. All engineering programs of study start with calculus 1 in the first semester; therefore, students not prepared for calculus 1 must take one or more preparatory math courses. As such, the School of Engineering and Technology would still require standardized test scores for direct admission to engineering programs. Also, in coordination with the math department, a specific threshold or higher on the math section of the SAT/ACT exempts engineering students from having to take the ALEKS math placement exam.</td>
</tr>
<tr>
<td>HEALTH AND HUMAN SCIENCES</td>
<td>GPA Essay Academic Honors</td>
<td>None indicated</td>
<td>Personnel time for review of essay if that is the criteria used.</td>
<td>Our school is in general support of eliminating the requirement for standardized test scores for admission. We support increased access for students.</td>
</tr>
<tr>
<td>INFORMATICS AND COMPUTING</td>
<td>GPA Combination of the following: Extracurricular activities Written essay Interview</td>
<td>None indicated</td>
<td>Apprehension of faculty, specifically in relation to preparation of incoming students, prestige of program if we do not require SAT/ACT</td>
<td>SoIC currently admits students based on a SAT/ACT score or GPA due to understanding that standardized testing does not always measure educational quality. While test optional would increase greater access/inclusion for IUPUI and in turn, SoIC, for underrepresented and underserved populations whom I am committed to</td>
</tr>
</tbody>
</table>
- Service Learning/community engagement

We piloted requesting portfolios from students with low GPA/SAT scores who applied to our Media Arts and Science program - it didn't work. We found that many of these students were not offered classes in high school that would help them prepare to submit a portfolio.

SPEA is in support of increasing access to opportunities like bridge and the first year seminars over keeping requirements like standardized tests that are known to serve as barriers to our underrepresented populations.

High school counselors are busy and asking them to write a letter of recommendation for students might bottleneck the application process.

### PUBLIC AND ENVIRONMENTAL AFFAIRS

<table>
<thead>
<tr>
<th>GPA</th>
<th>Rigor of HS curriculum Diploma Type Essay</th>
<th>None indicated</th>
<th>None indicated</th>
</tr>
</thead>
</table>

SPEA is in support of increasing access to opportunities like bridge and the first year seminars over keeping requirements like standardized tests that are known to serve as barriers to our underrepresented populations.

### PUBLIC HEALTH

<table>
<thead>
<tr>
<th>Rigor of HS curriculum Math during HS</th>
<th>Resources/manpower to holistically review each application</th>
</tr>
</thead>
</table>

### SCIENCE

### ACADEMIC UNITS THAT DON’T REQUIRE SAT/ACT FOR DIRECT ADMISSION

<table>
<thead>
<tr>
<th>ACADEMIC UNIT</th>
<th>Other Use of Test Scores</th>
<th>Challenges in Implementation</th>
<th>General Comments/Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTISTRY</td>
<td>None indicated</td>
<td>None indicated</td>
<td>Our program does not require standardized tests as part of our admission requirements. I’ve been director approximately 5 years and I’m not sure if we ever required them. It has not affected our ability to retain students or affect their ability to graduate. We focus on their science GPA as a main indicator of how well they will do in our program and it has worked well for us.</td>
</tr>
<tr>
<td>HERRON</td>
<td>None</td>
<td>None indicated</td>
<td>In support of change. No issues with accrediting body (NASAD).</td>
</tr>
<tr>
<td>LIBERAL ARTS</td>
<td>Two UGRD scholarships require test scores</td>
<td>None indicated</td>
<td>I realize that our institutional ranking includes on-time degree completion and I understand that students with above average transcripts and scores increase some of our data points. However, I perceive increasing our selectivity to be at odds with our mission. If we select only students with above average records, we eliminate opportunity for many of our residents. I understand that there is a full-fledged community college option in Indiana now and that students can begin their studies at IVY Tech. But I have found many of the most successful graduates during my time at IUPUI to be the students who might not be admitted given our current criteria.</td>
</tr>
</tbody>
</table>
welcome the discussion to remove the test score barrier. We do not have any accreditation requirements for test scores. Our programs use college GPA (overall and Math/Science) and interviews for admission. The only program who asks for a high school transcript are first semester freshmen applying for Radiography. They are just looking at GPA and not any standardized testing.

**MEDICINE**
None indicated
None indicated

**NURSING**
None indicated
None indicated

Currently don’t use SAT or ACT for admission. Wouldn't impact scholarships. Excited about the possibility of the campus moving to test optional.

**PHILANTHROPY**
None indicated
None indicated

We don't see it causing a problem for our school.

**SOCIAL WORK**
None indicated
None indicated

Social work is not a direct admit school. All must be admitted based on the Undergraduate Office of Admissions guidelines. We do not use standardized test scores for admission or program requirements. At this time, the newly appointed dean is not considering direct admits into the undergraduate program.

Relevant articles, research, and reports can be found in the following Box folder: [https://iu.box.com/s/5fxafuelcer002pfshghjcl5if7odks9](https://iu.box.com/s/5fxafuelcer002pfshghjcl5if7odks9)